AMENDMENTS TO THE CLAIMS:

Following is a listing of all claims in the present application, which listing supersedes all previously presented claims:

Listing of Claims:

1. (Original) A plasma generation system, comprising:

a microwave generator for generating microwaves;

a refractor for altering a direction of propagation of the microwaves; and

an electromagnetic unit for applying a magnetic field to plasma formed by the microwaves to generate electron cyclotron resonance (ECR).

2. (Original) The system as claimed in claim 1, wherein the refractor is a dielectric lens.

3. (Original) The system as claimed in claim 2, wherein the dielectric lens is formed of alumina.

4. (Original) The system as claimed in claim 1, wherein the microwave generator comprises:

a radio frequency power source for generating the microwaves;

a waveguide, which is connected to the radio frequency power source, for guiding the propagation of the microwaves; and

a polarizer, which is placed at an outlet of the waveguide, for polarizing the microwaves in a single direction.

5. (Currently Amended) The system as claimed in claim 1, further comprising:

a vacuum chamber connected to a lower portion of the refractor, the vacuum chamber including ~~a substrate etched by plasma and~~ a substrate holder for holding a ~~on which the~~ substrate to be etched ~~is seated~~.

6. (Currently Amended) A plasma generation system for use with a substrate, comprising:

a microwave generator for generating microwaves;

an antenna for forming an electric field component of the microwaves having a non-planar wavefront ~~in a single direction uniformly~~;

a refractor for receiving the microwaves having the non-planar wavefront and for transmitting the microwaves as plane waves having a wavefront parallel to [[a]] the substrate by refracting the microwaves; and

an electromagnetic unit for applying a magnetic field to plasma formed by the microwaves and for generating electron cyclotron resonance (ECR).

7. (Original) The system as claimed in claim 6, wherein the refractor is a dielectric lens.

8. (Original) The system as claimed in claim 7, wherein the dielectric lens is formed of alumina.

9. (Currently Amended) The system as claimed in claim 6, wherein the antenna is a ~~corrugated~~ horn antenna having a width that gradually increases in a direction of propagation of the microwaves ~~and having inner walls that are corrugated~~.

10. (Original) The system as claimed in claim 6, wherein the microwave generator comprises:

a radio frequency power source for generating the microwaves;

a waveguide, which is connected to the radio frequency power source, for guiding the propagation of the microwaves; and

a polarizer, which is placed at an outlet of the waveguide, for polarizing the microwaves in a single direction.

11. (Currently Amended) The system as claimed in claim 6, further comprising:

a vacuum chamber connected to a lower portion of the refractor, the vacuum chamber including ~~a substrate etched by plasma and~~ a substrate holder for holding a ~~on which the~~ substrate to be etched ~~is seated~~.

12. (New) The system as claimed in claim 1, wherein the refractor has a different thickness between a central portion and a peripheral portion.

13. (New) The system as claimed in claim 12, wherein the refractor is thicker in the central portion than in the peripheral portion.

14. (New) The system as claimed in claim 1, wherein the refractor has a central portion and a peripheral portion, a distance between the microwave generator and the central portions being different than a distance between the microwave generator and the peripheral portion.

15. (New) The system as claimed in claim 14, wherein the central portion is closer to the microwave generator than the peripheral portion.

16. (New) The system as claimed in claim 6, wherein the refractor has a different thickness between a central portion and a peripheral portion.

17. (New) The system as claimed in claim 16, wherein the refractor is thicker in the central portion than in the peripheral portion.

18. (New) The system as claimed in claim 6, wherein the refractor has a central portion and a peripheral portion, a distance between the microwave generator and the central portions being different than a distance between the microwave generator and the peripheral portion.

19. (New) The system as claimed in claim 18, wherein the central portion is closer to the microwave generator than the peripheral portion.

20. (New) The system as claimed in claim 9, wherein inner walls of the horn antenna are corrugated.